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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/509,267

10/27/2004

Ryoto Shima

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EXAMINER

NGUYEN, KHANH TUAN

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

04/14/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/509,267	Applicant(s) SHIMA ET AL.	
	Examiner KHANH T. NGUYEN	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on RCE filed 03/10/2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 03/10/2008 has been entered.

Response to Amendment

2. The amendment filed on 03/10/2008 is entered and acknowledged by the Examiner. Claims 1-26 are currently pending in the instant application.

3. The affidavit filed on 03/10/2008 under 37 CFR 1.131 is sufficient to overcome the Fukuda et al. (U.S. Pat. 5,082,596) and Azechi et al. (U.S. Pub. 2002/0049274) reference.

Withdrawn Rejection(s)

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4. The rejections of 4 claims 1-26 under 35 U.S.C. 103(a) as being unpatentable over Fukuda et al. (U.S. Pat. 5,082,596) in view of Azechi et al. (U.S. Pub. 2002/0049274) is withdrawn in view of Applicant's amendment and remark.

Information Disclosure Statement

5. No information disclosure statement (IDS) filed.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

8. Claims 1-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Iino (U.S. Pat. 6,309,563 hereinafter, "Iino") or Nakano et al. (U.S. Pat. 5,229,037 hereinafter, "Nakano") in view of Hamachi et al. (U.S. Pat. 5,840,831 hereinafter, "Hamachi").

With respect to claims 1-8, lino teaches a conductive silicone rubber composition comprising of (A) an organopolysiloxane having a plurality alkenyl groups (Col. 2, line 66 to Col. 3, line 33) and (B) a conductive powder based on silver powder (Col. 3, lines 29-34) in combination with inorganic filler such as silicone rubber powder (Col. 3, lines 55-60). lino teaches the said inorganic filler may be surface treated with a surface active agent to prevent agglomeration (Col. 4, lines 16-43). lino also teaches the inorganic filler is used in an amount of 0.5 to 5 wt. % per 100 parts by weight of silver powder (Col. 4, lines 44-47). The amount of (B) conductive powder in said composition is 100 to 800 parts by weight per 100 parts by weight of (A) organopolysiloxane (Col. 4, lines 59-61). lino further teaches the said composition comprising of (C) a platinum base catalyst in an amount of about 1 to 2,000 ppm based on amount of component (A) (Col. 5, lines 3-11), (D) an organosilicon compound acting as an adhesion imparting agent (Col. 4, lines 62-64), (E) electrically conductive filler such as conductive carbon particle, metal powder (e.g. Ni, Ag, and Al), and metal oxide in an amount of 100 parts by weight (Col. 6, line 64 to Col. 7, line 23).

Similarly, Nakano teaches an electroconductive silicone rubber composition comprising of (a) 100 parts by weight of a diorganopolysiloxane, (b) 5 to 100 parts by weight of a spherical cured silicone elastomer particles, (c) 100 to 1200 parts by weight of electrically conductive agent, (d) a platinum based catalyst and (e) up to 20 parts by weight of a liquid organosilicon acting as a reaction inhibitor to prevent curing of the composition and cracking of the organopolysiloxane molecules due to the addition of electrically conductive agent (Col. 2, lines 33-68).

The difference between the prior arts and the instant claimed invention is that Iino failed to teach the silicone rubber composition with a surface active agent in an amount greater than 0 but not more than 0.3 wt. %.

However, Hamachi generally teaches a cured silicone powder prepared by dispersing the silicone powder in an aqueous surfactant solution and cured, then dried. (Col. 2, lines 57-64). Hamachi further exemplify in Example 1 wherein silicone rubber powder (A) is dispersed in 4 parts by weight of a surface active agent and 200 parts by weight of pure water. The silicone rubber powder is then heated to dry. Next, 10 parts by weight of the silicone rubber powder is re-dispersed into a sodium hydroxide and water solution. The silicone rubber powder is then filtered and washing. Since Hamachi teaches a similar method of producing a silicone rubber powder as disclosed by the application's Reference Example 2 at paragraph [0027] of the specification, the content of the surface active agent will be approximately 0.1 wt. %. Moreover, it has been held that where general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges (i.e. content of surface active agent greater than 0 not more than 0.3 wt. %) involves only routine skill in the art. *In re Aller*, 220 F2d 454,456,105 USPQ 233,235 (CCPA 1955).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the silicone rubber powder with about 0.1 wt. % of surface active agent of Hamachi into the conductive silicone rubber composition of either Iino or Nakano because both Iino and Nakano teaches a conductive silicone rubber composition comprising a silicone rubber powder and Hamachi teaches a

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method of producing a silicone rubber powder having a content of about 0.1 wt. % of surface active agent. Thus, it is within the expected skills of one having ordinary skill in the art to produce the claimed silicone rubber powder and incorporated the said silicone rubber powder into a conductive silicone rubber composition.

Claims 10 and 20-26 recites the phrase "a product prepared by" which is deemed as a product by process claim. A product by process claim does not depend on its method of production (i.e. curing) and where the examiner has found a similar product, the burden rests with the applicant to prove that that product is patentably distinct. See *In re Thorpe*, 227 USPQ 964 (CAFC 1985); *In re Marosi et al*, 218 USPQ 289; *In re Pilkington*, 162 USPQ 145. "The lack of physical description in a product-by-process claim makes the determination of the patentability of the claim more difficult, since in spite of the fact that the claim may recite only process limitations, it is the patentability of the product claimed and not the process that must be established. We are therefore of the opinion that when the prior art discloses a product which reasonably appears to be identical with or only slightly different than a product claimed in a product-by-process claim, a rejection based alternatively on either section 102 or 103 of the statute is eminently fair and acceptable. As a practical matter, the Patent Office is not equipped to manufacture products by the myriad processes put before it and then obtain prior art products and make physical comparisons therewith." *In re Brown*, 173 USPQ 685,688 (CCPA 1972).

Regarding claims 9 and 11-19, lino further discloses the conductive silicone rubber composition may be molded to a shape by various molding methods (Col. 6, lines 36-39). Similarly, Nakano teaches the conductive silicone rubber composition may be molded to a shape by compression molding, transfer molding, extrusion molding, injection molding and calendaring (Col. 6, lines 36-43).

Response to Arguments

9. Applicant's arguments filed on 03/10/2008 have been fully considered but are moot in view of the new ground(s) of rejection set forth above.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KHANH T. NGUYEN whose telephone number is (571)272-8082. The examiner can normally be reached on Monday-Friday 8:00-5:00 EST PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark Kopec/
Primary Examiner, Art Unit 1796

/KTN/
03/27/2008